

Hatchery Spawning by Thermal Shock of the American Oyster *Crassostrea virginica*

Will evaluate comprehension of spawning techniques for the American oyster *Crassostrea virginica* in MASGP09-026.

Total Questions » 16

- Q.1) What is a method hatchery managers use to select broodstock for spawning?
- A. Shell color
 - B. How an oyster sounds when dropped on concrete
 - C. Valuable characteristics including tolerance to poor water quality and growth rate
 - D. Taste
- Q.2) Before a selected oyster can be spawned, what must a hatchery manager do?
- A. clean them
 - B. shake them
 - C. sing to them
 - D. roll them in sand
- Q.3) Once placed into spawning units, how does a hatchery manager know the oysters are alive and doing well?
- A. oyster turn over
 - B. oyster grow
 - C. oyster open and filter water
 - D. oyster change colors
- Q.4) How does a hatchery manager make the selected broodstock spawn?
- A. add cold water
 - B. add heater water
 - C. turn water flow on
 - D. turn water flow off
- Q.5) What else does a hatchery manager do to help induce broodstock to spawn?
- A. shake spawning container
 - B. play music
 - C. add dead oyster sperm
 - D. add unfertilized eggs
 - E. add fertilized eggs

- Q.6)** When does a hatchery manager know if a selected broodstock is a male or female?
- A. shell size
 - B. shell color
 - C. when spawning begins
 - D. shell weight
- Q.7)** When eggs are released by females, hatchery managers collect them and add sea water with sperm. Why do they add sea water?
- A. eggs need to hydrate
 - B. protects the egg
 - C. lower egg temperature
 - D. makes it easier to pour eggs out
- Q.8)** Hatchery managers will mix sperm from several males when spawning oysters
- A. True
 - B. False
- Q.9)** How does a hatchery manager determine if an oyster egg has been fertilized?
- A. egg changes shape
 - B. nucleus of egg disappears
 - C. egg begins to spin
 - D. egg changes color
- Q.10)** How long after fertilization before the blastula stage is reached?
- A. 1 minute
 - B. 1 hour
 - C. 4 hours
 - D. 4 days
- Q.11)** How does a hatchery manager know how many larvae are produced in a spawn?
- A. count each individual
 - B. count by volumetric estimation
 - C. guess
 - D. look it up in book
 - E. it is not important so they do not try

Q.12) After how many hours post fertilization does a "D hinged veliger" form?

- A. 1 hour
- B. 12 hours
- C. 24 hours
- D. 36 hours
- E. 48 hours

Q.13) What does an "eyed larvae" indicate to the hatchery manager?

- A. larvae is dead
- B. larvae is hungry
- C. larvae is almost ready to set
- D. larvae is a male
- E. larvae is a female

Q.14) What does a pediveliger tell the hatchery manager?

- A. larvae is a male
- B. larvae is a female
- C. larvae is ready to set
- D. larvae is sick

Q.15) How many days after spawning before larvae are ready to set?

- A. 7 days
- B. 14 days
- C. 21 days
- D. 28 days

Q.16) What do oyster larvae prefer to set on?

- A. mud
- B. oyster shell
- C. grass
- D. hard substrate
- E. micro-cultch